Unisys

RECOMMENDATIONS FOR THE STATE OF ARIZONA TELECOMMUNICATIONS EXECUTIVE GOVERNANCE COMMITTEE REGARDING PRIVATIZATION OF STATE TELECOMMUNICATIONS SERVICES

INTRODUCTION

The State of Arizona ADOA and GITA have reviewed various options available to the State for providing telecommunication services to the various agencies that would best meet budgetary and legislative requirements and have determined that preferred option is Privatized Statewide Telecommunications Services Using Facilities Management. Over the past 115 years, Unisys has evolved into a services led, technology driven IT solution company providing a wide range of value-added services, including systems integration, outsourcing, infrastructure, server technology, and consulting services. Unisys follows a proven architecture-based approach and methodology to provide a total lifecycle of services to its clients, beginning with industry-standard IT governance, process improvement and best practices, using ITIL (IT Infrastructure Library) and Six Sigma concepts, leading to development of best-in-class data and telecommunications architectures which enable specific business requirements and processes. The architectural designs are predicated on the concepts of migration and re-use of assets to provide a scalable, secure, highly available, flexible and manageable infrastructure. Unisys can then provide design, implementation, maintenance services and remote management of the infrastructure and/or total or partial outsourcing of the network, data center, desktops or help desk environment. Unisys specializes in contract flexibility and can front-load or back-load the outsourcing contract to meet the budgetary requirements of the State. We have proven ROI and capital spending savings models from our work with the Commonwealth of Pennsylvania ($110M savings over 5 years), the cities of Minneapolis and Chicago and the federal Transportation Security Administration (TSA) outsourcing contracts and look forward to providing similar savings to the citizens of Arizona.

RECOMMENDATIONS

Service Delivery Model

Unisys understands the State's need to privatize its telecommunications infrastructure and migrating assets, FTEs, and service contract management to a third party is the most likely model to give the State the flexibility in its acquisition and utilization of its telecommunications infrastructure. This model will free up State resources to focus on providing new applications and services relating to eGovernment to the citizens as well as capitalizing on the total State purchasing power by consolidating all telecommunications service contracts and requiring the individual agencies to purchase capacity and business services from ADOA or GITA rather than buying individual telecom services from carriers. By implementing a converged voice, video and data network utilizing Internet Protocol (IP) technologies over State-owned optical fibers, leased services and wireless infrastructures, the State can offer IP-based "services", such as directory services, voicemail, voice communications, conferencing, application sharing, database sharing, access/authentication/authorization services, and many more, to the various agencies in event the most remote locations. When an agency needs access to a particular service, either short-term or long-term, the service would be enabled for access by that agency and billed appropriately according to pre-determined pricing models. For example, an agency wishes to have a video conference using the converged network – the request is made to the facilities manager, who provisions the conference service to the locations where the conference will take place, the conference occurs and the service is then de-provisioned and the agency is billed for the use of the service.

Having a single, converged network to provide these basic services across the State will also minimize the technology and people needed to manage the infrastructure as well as reduce the number of services and circuits the State is currently paying for. While redundancy in the overall network design is critical for high availability, having multiple circuits connecting all the individual State agency offices across the State is not cost effective and requires redundant management resources. By assessing and measuring the current bandwidth utilization of the various agencies between offices and understanding the business, data, voice, and application flows utilized by the agencies, Unisys can design a single, wide area network (WAN) backbone to carry the all of the communications of all of the agencies in an optimized manner which allows unused capacity of one agency to be used by another, with each agency paying for only the bandwidth they use. Selection of scalable products and technologies will also give the State the ability to quickly react to new mandates or communications requirements with minimal capital expense. The overall service model we propose could be considered a "utility" or "on-demand" service model, where Unisys acts as an agent for the State in negotiating and managing service provider contracts, takes ownership of usable assets and FTEs and provides remote management of the telecommunications infrastructure while providing monitoring a reporting access to GITA or other State agency IT departments.

Migration Strategies

Having a proven outsourcing migration process is critical to the success of any privatization project. Unisys has developed such a process over the years of outsourcing IT infrastructures for both public and private sector clients. One of the critical success factors in any outsourcing project is flexibility in contract development Unisys would work with the State to backload or frontload costs, depending on the State funding and where they were in the budget cycle. This would enable the State to implement mandated upgrades even when GITA may not have the budget for it. The migration can be planned to match the business and funding requirements of the various agencies and GITA. Migration would happen in a phased approach, with the overall architecture and design work being done after a current state assessment and capacity planning project determined the services and assets which could be reused or redeployed. Prioritization of which agencies would be moved to the new infrastructure, based on need, would also be determined during this planning phase. Existing contracts with carriers (wired and wireless) would be reviewed and scheduled for rollover to the new network or for retirement. Data applications would be migrated, according to priorities determined by GITA or the appropriate governing agency, to the new network once all physical components of the network were in place and a single authorization and authentication service was enabled to manage the security of the applications and data. Voice communications and applications would be migrated to the new network, using "IP trunking" to carry voice traffic between sites initially, then migrating to IP PBX, IP Centrex or hosted IP voice services and IP phones where appropriate. Call centers could be the first locations to fully migrate to IP Telephony, since this is a logical convergence of voice and data applications. Without doing a detailed study of the State's voice traffic, it is impossible to determine the best migration plan for existing voice assets at this time.

Migration of technology and capital assets are not the only pieces of a migration strategy – migration of human resources is also critical for the overall success of the privatization and outsourcing process. Unisys would expect to assume some FTEs from the State to monitor and support the infrastructure, but existing Unisys staff that are supporting or monitoring other client infrastructure would be utilized as a means to achieve economies of scale by spreading the cost of those employees and the tools used to monitor the network across multiple clients. FTEs who are not migrated to Unisys could be retrained and/or reassigned to work on other critical projects for the State, or terminated from the State payroll. Unisys may also provide help desk services, if required by the State, as part of the ongoing support of the end users. The benefit of migrating State employees to Unisys becomes crucial, as exit strategies are determined. If the State decides to in-source the network at some point in the future, these employees could be migrated back to the State with the current knowledge of the monitoring and support tools and processes as well as to provide a consistent interface to the users. Other exit strategies, such as migrating

the whole network to another service provider or outsourcer, or increasing components to be outsourced, such as data centers, are options which could be discussed during contract negotiations.

Cost Saving Measures

Realizing value from existing assets is a key philosophy of Unisys in our architecture, design and outsourcing services. Once all of the current assets have been inventoried, depreciation status determined and software/firmware versions have been assessed for currency, the assets that are still viable for use within the new infrastructure will be brought up to a minimum level of functionality, consistent with the overall design strategy, then redeployed to locations within the network where they can be utilized effectively. Some major assets, such as the Nortel telephony switches, may be upgraded by adding modules to support voice over IP and IP telephony capabilities as needed, rather than resorting to a "forklift" upgrade of the switch and all of the phones. As mentioned previously, network management and monitoring tools could be enhanced at minimal cost by the use of Unisys remote management services, where the State would only pay a small percentage of the overall tool cost due to the tools and FTEs being used to monitor multiple networks and the cost associated with the monitoring spread over those networks. Similar resource sharing could occur with the backbone routers or switches, with a single physical device being used to support multiple logical networks, with secure separation of these networks being implemented with industry-standard protocols and technologies.

Consolidation of bandwidth utilization has already been mentioned as a cost saving measure as has leveraging the total buying power of the State during contract negotiations with wired and wireless service providers. New technologies, such as wireless LAN technologies, and 2.5G cellular services, could be utilized to replace proprietary wireless services in the public safety, DOT and other agencies with mobile users. A single, centrally managed user access authorization system could be utilized to replace the multiple access control systems that are in place today and also provide a more secure and manageable user provisioning system. The deployment of "IP utility services" would minimize redundant purchasing of similar applications across agencies and make inter-agency communication more efficient and user friendly. In general, implementing a single, converged IP network across the State will deliver major advantages relating to economies of scale and combined purchasing power, to enable to State to achieve its goal of removing 10% or more of its underlying telecommunications costs. Tracking the ROI of this project will be mandatory, so measurable metrics pertaining to cost, productivity improvements, availability, security and end to end performance of the network must be identified early in the assessment phase and tracked throughout the migration process and on-going delivery of the network services to ensure the service levels are being delivered as agreed by the State and Unisys.

CONCLUSION

Migrating to a single, converged, managed telecommunications and data communications infrastructure can be a complex and expensive process, but it is a necessary first step in utilizing technology to enable the State to implement new legislative mandates, provide better service to residents and in making the State a technology leader among the States. Unisys is a recognized leader in the outsourcing and infrastructure transformation and managed services by industry analysts such as Gartner, META Group and IDC and has been entrusted with the critical outsourcing and management of IT infrastructures for the Commonwealth of Pennsylvania, the City of Chicago, the City of Minneapolis, Monmouth County in New Jersey, among others. Unisys looks forward to the opportunity to work with the State of Arizona and the Telecommunications Executive Governance Committee to help deliver a privatized telecommunications infrastructure in a cost effective, efficient manner.